underlayer disposed between each of said magnetic bias regions and one of said end portions of said magnetoresistive laver.

- 12. The thin-film magnetoresistive transducer as set forth in claim 1 wherein each of said magnetic bias 5 regions is disposed atop one of said end portions of said magnetoresistive layer.
- 13. A thin-film magnetoresistive transducer for converting changes in magnetic flux from a recording medium as electrical signals, comprising:
 - a magnetoresistive layer formed of ferromagnetic material, said magnetoresistive layer including end portions spaced by a central active portion:

first and second magnetic bias regions, each of said netized layers formed of hard magnetic material, each of said magnetic bias regions being disposed in contact with one of said end portions of said magnetoresistive layer, said magnetic bias regions cooperatively providing a magnetic bias to said mag- 20 layer comprises chromium. netoresistive layer; and

means for applying an electrical signal through said magnetoresistive layer whereby resistivity of said magnetoresistive layer varies in response to changes in magnetic flux detected by said trans- 25 sistive layer. ducer so that a varying voltage is generated at said magnetoresistive layer, wherein said varying voltage corresponds to the electrical signal converted by said transducer.

14. The thin-film magnetoresistive transducer as set forth in claim 13 wherein said magnetic bias is a longitudinal magnetic bias, and wherein said transducer further comprises a soft adjacent layer disposed parallel to and separated from said magnetoresistive layer by a spacer layer, said soft adjacent layer providing a transverse magnetic bias to said magnetoresistive layer.

15. The thin-film magnetoresistive transducer as set forth in claim 14 further comprising a non-magnetic 10 underlayer disposed between each of said magnetic bias regions and one of said end portions of said magnetoresistive layer.

16. The thin-film magnetoresistive transducer as set forth in claim 13 wherein each of said magnetic bias magnetic bias regions including a plurality of mag- 15 regions includes two magnetized layers and a non-magnetic interposing layer for spacing said magnetized lay-

> 17. The thin-film magnetoresistive transducer as set forth in claim 16 wherein said non-magnetic interposing

18. The thin-film magnetoresistive transducer as set forth in claim 17 further comprising a non-magnetic underlayer disposed between each of said magnetic bias regions and one of said end portions of said magnetore-

19. The thin-film magnetoresistive transducer as set forth in claim 18 wherein said non-magnetic underlayer comprises chromium.

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